

REMARKS

By this Amendment, claims 19-36 are amended merely to clarify the claimed subject matter. Claims 1-36 are pending.

Although the Office has indicated a willingness to allow claims 7 and 25, providing that these claims are rewritten in independent form including all of the limitations of any base and intervening claims, Applicant delays the rewriting of those claims so that the Office may fully reconsider the patentability of the rejected base claims.

The Office Action rejected claims 1-2, 6, 8-12, 14-20, 24, 26-30 and 32-36 under 35 U.S.C. §103(a) as being unpatentable over Molinari et al. (U.S. 6,308,065; hereafter “Molinari”) in view of Naslund (U.S. 6,223,031). Claims 3-4 and 21-22 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Molinari in view of Naslund and further in view of Rahman (U.S. 6,445,916). Claims 5, 13, 23, and 31 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Molinari in view of Naslund and further in view of Jones (U.S. 5,752,164). Applicant traverses the rejections because: (1) the combined teachings of the cited prior art fail to teach or suggest all the features recited in the rejected claims and (2) one of ordinary skill in the art would not have been motivated to combine Molinari and Naslund in the way asserted by the Office Action.

THE CITED PRIOR ART REFERENCES FAIL TO TEACH OR SUGGEST ALL THE FEATURES RECITED IN THE REJECTED CLAIMS

For example, the combined teachings of the cited prior art fail to teach or suggest a method for performing channel configuration of a base station in a cellular radio network, the method comprising “directing a fixed receiver box located in a cell associated with the base station but apart from the base station to receive at least one physical channel transmitted by the base station and to measure at least one channel parameter representing the properties of said at least one physical channel; transmitting a measurement report on the measurements performed by the receiver box to the controller; selecting by the controller on the basis of at least one measurement report at least one physical channel enabling good range; directing the base station to use at least one physical channel enabling good range” as recited in independent claim 1 and its respective dependent claims.

Similarly, the cited prior art fails to teach a network part including “at least one fixed receiver box located in a cell associated with the base station but apart from the base station and which comprises means for receiving control commands from the controller, means for

measuring at least one channel parameter representing the properties of at least one physical channel transmitted by the base station, and means for transmitting a measurement report on measurements performed by the receiver box to the controller, and the controller comprises means for directing the base station to transmit a logical control channel on at least one physical channel allowed for the cellular radio network, means for directing the fixed receiver box to receive at least one physical channel transmitted by the base station, means for selecting on the basis of at least one measurement report at least one physical channel enabling good range, and means for directing the base station to use at least one physical channel enabling good range” as recited in independent claim 19 and its dependent claims.

Molinari merely teaches an apparatus and a method for testing cellular base stations. In Molinari, the base station tester (see, Figure 1 and its accompanying textual description) is connected to a fixed link between a base station controller and a base station. The base station tester is also connected to a coaxial cable between an antenna and the base station. Therefore, the base station tester can obtain Radio Frequency (RF) signals generated by the base station or by a mobile station. The RF signal is used to observe the behavior of the base station as it reacts to commands received on the fixed link. The connection for obtaining RF signals (the connection to the coaxial cable between the antenna and the base station) can also simply be replaced by another antenna specific to the base station tester. Nevertheless, the aim is to non-invasively obtain the RF signal so that the (internal) operation of the base station is not affected by operation of the tester.

Although Molinari teaches that frequencies and power levels can be changed (see column 4, line 64), this teaching relates only to the testing of the operation of the transmitter and not to the testing of the channels themselves. Therefore, Molinari performs parametric tests merely to evaluate the internal operation of a base station. Therefore, Molinari fails to provide teachings that may be applied to a fixed receiver box located in a cell associated with the base station but apart from the base station.

Naslund fails to remedy this deficiency because Naslund actually performs measurements using a receiver located in the base station. In fact, the measurements provided by the claimed invention are superior of those provided by Naslund because the receiver box is not located at the base station; therefore, the measurements better reflect the conditions in the cell. Additionally, in use of the claimed invention, base stations of several manufacturers may co-exist simultaneously while still allowing the invention to be easily

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implemented, whereas, in Naslund, such co-existence is more difficult if not impossible because the measuring receiver is located in the base station.

Rahman and Jones fail to remedy this deficiency of Molinari and Naslund because Rahman and Jones. Therefore, the combined teachings of the cited prior art fail to teach or suggest all the features recited in the rejected claims. Accordingly, the prior art rejections are traversed.

NO MOTIVATION TO COMBINE MOLINARI AND NASLUND

Moreover, one of ordinary skill in the art would not have combined the teachings of Molinari and Naslund because the two references deal with technological solutions for drastically different problems from each other and from the claimed invention.

In Molinari, RF behavior of the base station is measured at the antenna in real-time, responsive to commands received on the fixed link. However, these measurements have nothing to do with dynamic channel configuration as in the claimed invention. Rather, in Molinari, reactions of the base station with the RF signal to the command received from the control channel are analyzed to provide parametric transmitter measurements. Additionally, parametric receiver measurements, e.g., bit error rate and receiver sensitivity, may also be conducted. Furthermore, traffic conditions including the loading of the base station, call hand-offs and the type of the traffic present may be monitored and used to obtain more detailed parametric tests in a non-invasive manner.

To the contrary, Naslund merely discloses a process and a device for measuring the quality of channels. These measurements can be used for dynamic channel allocation or adaptive frequency allocation. In Naslund, the base station comprises a measuring receiver which can measure uplink and downlink channels and scans the channels and measures their signal strength. In Naslund, transmission of control channels and their measurement is not only controlled, but the measurements are made on certain channels, which may contain ongoing connections between base station and mobile station. Thus, the teachings of Naslund are directed to dynamic channel allocation rather than to frequency planning.

To the contrary, the claimed invention is directed to channel configuration, which is not internal to a base station; rather, channel configuration is an operation having effect on a cellular radio system itself, namely on the use of its valuable channel resources.

Because Molinari is directed to the internal operation of a base station and Naslund is directed to conventional dynamic channel allocation, one of ordinary skill in the art would

not have been motivated to combine their teachings to produce the channel configuration solution provided by the claimed invention. .

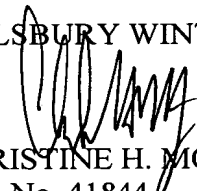
Similarly, Rahman and Jones do not remedy the deficiencies of Molinari and Naslund. Therefore, the rejections are traversed because one of ordinary skill in the art would not have combined the references as speculated by the Office Action.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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